



"Express Mail" Label No. EV 291387931 US  
Date of Deposit September 20, 2004

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Address" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

By: 

Tara N. Damhoff

**PATENT**  
Docket No.: 015389-002970US  
Client Ref. No.: 018/182C

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Cech et al.

Application No.: 10/054,611

Filed: January 18, 2002

For: METHODS FOR DETECTING  
NUCLEIC ACIDS ENCODING HUMAN  
TELOMERASE REVERSE  
TRANSCRIPTASE (AMENDED)

Examiner: Malgorzata A. Walicka

Art Unit: 1652

**COMMUNICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants enclose herewith a supplemental information disclosure statement. The enclosed IDS lists the same documents as cited in the IDS that was mailed on August 19, 2004.

Applicants request that the Examiner disregard the IDS submitted August 19, 2004, as the certification made in that statement was made in error. Applicants instead ask that the Examiner consider the enclosed replacement IDS and provide Applicants a marked off copy of this IDS in the next communication from the Patent Office. The enclosed IDS authorizes the Office to charge the \$180 IDS fee to Deposit Account No. 20-1430.

Cech et al.  
Application No.: 10/054,611  
Page 2

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 571-4000.

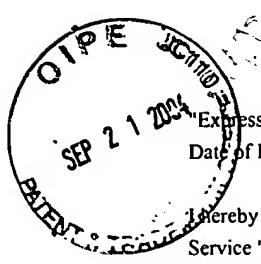
Respectfully submitted,



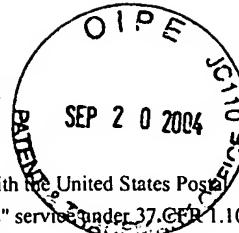
Scott L. Ausenhus  
Reg. No. 42,271

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: (303) 571-4000  
Fax: (415) 576-0300  
SLA:sla

60313036 v1



"Express Mail" Label No. EV 291387931 US  
Date of Deposit September 20, 2004



**PATENT**  
Attorney Docket No.: 015389-002970US  
Client Reference No.: 018/182C

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Commissioner for Patents

P.O. Box 1450

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By: 

Tara N. Damhoff

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Thomas R. Cech et al.

Application No.: 10/054,611

Filed: January 18, 2002

For: METHODS FOR DETECTING  
NUCLEIC ACIDS ENCODING HUMAN  
TELOMERASE REVERSE  
TRANSCRIPTASE (AMENDED)

Customer No.: 20350

Confirmation No: 6534

Examiner: Malgorzata A. Walicka

Art Unit: 1652

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT UNDER 37  
CFR §1.97 and §1.98

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are not enclosed as these have been submitted previously with the IDS submitted August 19, 2004.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Scott L. Ausenhus  
Reg. No. 42,271

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 303-571-4000  
Fax: 303-571-4321  
SLA:nmb

60286486 v2

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

|                      |                       |
|----------------------|-----------------------|
| Application Number   | 10/054,611            |
| Filing Date          | January 18, 2002      |
| First Named Inventor | Cech, Thomas R.       |
| Art Unit             | 1652                  |
| Examiner Name        | Malgorzata A. Walicka |

Attorney Docket Number 015389-002970US

**U.S. PATENT DOCUMENTS+**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number |                                   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|-----------------|-----------------------------------|--------------------------------|--|--|
|                    |                       | Number          | Kind Code <sup>2</sup> (if known) |                                |  |  |
|                    | A1                    |                 |                                   |                                |  |  |
|                    | A2                    |                 |                                   |                                |  |  |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   |                     |                                   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup>           |
|--------------------|-----------------------|---------------------------|---------------------|-----------------------------------|--------------------------------|---|--|--------------------------|
|                    |                       | Country Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |                                |   |  |                          |
|                    | B1                    |                           |                     |                                   |                                |   |  | <input type="checkbox"/> |
|                    | B2                    |                           |                     |                                   |                                |   |  | <input type="checkbox"/> |

Examiner Signature

Date Considered

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>2</sup> Applicant's unique citation designation number (optional). <sup>3</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

60286486 v2

|  |   |    |                          |
|--|---|----|--------------------------|
| Substitute for form 1449B/PTO                            |   |    |                          |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b> |   |    |                          |
| (use as many sheets as necessary)                        |   |    |                          |
| Sheet  | 2 | of | 2                        |
|  |   |    | <i>Complete if Known</i> |
| Application Number                                       |   |    | 10/054,611               |
| Filing Date  |   |    | January 18, 2002         |
| First Named Inventor                                     |   |    | Cech, Thomas R.          |
| Art Unit   |   |    | 1652                     |
| Examiner Name  |   |    | Malgorzata A. Walicka    |
| Attorney Docket Number                                   |   |    | 015389-002970US          |

| NON PATENT LITERATURE DOCUMENTS |                       |   |                |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials *             | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                                 | C1                    | ANDERSON, W. FRENCH "Human Gene Therapy" <i>Nature</i> , April 30, 1998, pp. 25-30, Vol. 392, Supp.   |                |
|                                 | C2                    | CAMPBELL, KEITH & WILMUT, IAN "Totipotency or Multipotentiality of Cultured Cells: Applications and Progress" <i>Theriogenology</i> , January 1997, pp. 63-72, Vol. 47, Issue 1, Elsevier Science Inc.  |                |
|                                 | C3                    | GEARHART, JOHN "New Potential for Human Embryonic Stem Cells" <i>Science</i> , November 6, 1998; pp. 1061-1062, Vol. 282, Issue 5391.   |                |
|                                 | C4                    | HORNISBY, PJ et al. "Adrenocortical Cells Immortalized by Telomerase: Potential Use for <i>Ex Vivo</i> Gene Therapy" <i>Journal of Anti-Aging Medicine</i> , 2000, pp. 411-417, Vol. 3, No. 4.  |                |
|                                 | C5                    | OSTLER ELIZABETH L. et al. "Telomerase and the Cellular Lifespan: Implications for the Aging Process" <i>J. of Pediatric Endocrinology &amp; Metabolism</i> , 2000, pp. 1467-1476, Vol. 13, Supplement 6, Freund Publishing House Ltd. London.                  |                |
|                                 | C6                    | THOMSON, JAMES A. et al. "Embryonic Stem Cell Lines Derived from Human Blastocysts" <i>Science</i> , November 6, 1998; pp. 1145-1147, Vol. 282, Issue 5391.   |                |
|                                 | C7                    |   |                |

|                    |                 |
|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

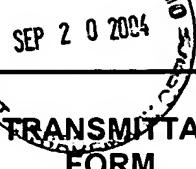
69-22-04

PTO/SB/21 (04-04)

1652  
TfwTRANSMITTAL  
FORM

(to be used for all correspondence after initial filing)

MAIL DATE



|  |  |                        |                       |
|--|--|------------------------|-----------------------|
|  |  | Application Number     | 10/054,611            |
|  |  | Filing Date            | January 18, 2002      |
|  |  | First Named Inventor   | Cech, Thomas R.       |
|  |  | Art Unit               | 1652                  |
|  |  | Examiner Name          | Malgorzata A. Walicka |
| Total Number of Pages in This Submission |  | Attorney Docket Number | 015389-002970US       |

| ENCLOSURES (Check all that apply)  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form                     | <input type="checkbox"/> Drawing(s)  | <input type="checkbox"/> After Allowance Communication to Technology Center (TC)        |
| <input type="checkbox"/> Fee Attached  | <input type="checkbox"/> Licensing-related Papers  | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences     |
| <input type="checkbox"/> Amendment/Reply                                     | <input type="checkbox"/> Petition  | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final   | <input type="checkbox"/> Petition to Convert to a Provisional Application                        | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declaration(s)                           | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address          | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request                           | <input type="checkbox"/> Terminal Disclaimer   | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):         |
| <input type="checkbox"/> Express Abandonment Request                         | <input type="checkbox"/> Request for Refund  | <input type="checkbox"/> Return Postcard  |
| <input checked="" type="checkbox"/> Information Disclosure Statement         | <input type="checkbox"/> CD, Number of CD(s) _____   | Communication   |
| <input type="checkbox"/> Certified Copy of Priority Document(s)              | Remarks The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430. |   |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application   |  |   |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 |  |   |

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|                         |                                    |  |
|-------------------------|------------------------------------|--|
| Firm or Individual name | Townsend and Townsend and Crew LLP |  |
| Signature               |                                    |  |
| Date                    | Reg. No. 42,271                    |  |
| September 20, 2004      |                                    |  |

## CERTIFICATE OF TRANSMISSION/MAILING

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I hereby certify that this correspondence is being deposited with the United States Postal Service with "Express Mail Post Office to Address" service under 37 CFR 1.10 on this date September 20, 2004 and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

|                       |                 |      |                    |
|-----------------------|-----------------|------|--------------------|
| Typed or printed name | Tara N. Damhoff |      |                    |
| Signature             |                 | Date | September 20, 2004 |

60312464 v1

**FEE TRANSMITTAL  
for FY 2004**

*Effective 10/01/2003. Patent fees are subject to annual revision.*

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$ 180)

**Complete if Known**

|                      |                       |
|----------------------|-----------------------|
| Application Number   | 10/054,611            |
| Filing Date          | January 18, 2002      |
| First Named Inventor | Cech, Thomas R.       |
| Examiner Name        | Malgorzata A. Walicka |
| Art Unit             | 1652                  |
| Attorney Docket No.  | 015389-002970US       |

**METHOD OF PAYMENT (check all that apply)**

Check  Credit Card  Money Order  Other  None  
 Deposit Account:

Deposit  
Account  
Number

20-1430

Deposit  
Account  
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee  
 to the above-identified deposit account.

**FEE CALCULATION**

**1. BASIC FILING FEE**

Large Entity  Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description        | Fee Paid |
|----------|----------|----------|----------|------------------------|----------|
| 1001     | 770      | 2001     | 385      | Utility filing fee     |          |
| 1002     | 340      | 2002     | 170      | Design filing fee      |          |
| 1003     | 530      | 2003     | 265      | Plant filing fee       |          |
| 1004     | 770      | 2004     | 385      | Reissue filing fee     |          |
| 1005     | 180      | 2005     | 80       | Provisional filing fee |          |

SUBTOTAL (1) (\$0)

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims | Independent Claims | Multiple Dependent | Fee from<br>Extra Claims | Fee from<br>below | Fee Paid |
|--------------|--------------------|--------------------|--------------------------|-------------------|----------|
|              |                    |                    | **                       | =                 | X =      |
|              |                    |                    |                          |                   |          |
|              |                    |                    |                          |                   |          |
|              |                    |                    |                          |                   |          |

Large Entity  Small Entity

| Fee Code | Fee (\$) | Fee Code | Fee (\$) | Fee Description  |
|----------|----------|----------|----------|--|
| 1202     | 18       | 2202     | 9        | Claims in excess of 20                                     |
| 1201     | 86       | 2201     | 43       | Independent claims in excess of 3                          |
| 1203     | 290      | 2203     | 145      | Multiple dependent claim, if not paid                      |
| 1204     | 86       | 2204     | 43       | ** Reissue independent claims over original patent         |
| 1205     | 18       | 2205     | 9        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$0)

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)**

**3. ADDITIONAL FEES**

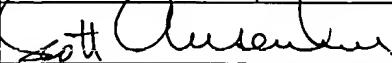
| Large Entity Fee Code | Fee (\$) | Small Entity Fee Code | Fee (\$) | Fee Description  | Fee Paid |
|-----------------------|----------|-----------------------|----------|--|----------|
| 1051                  | 130      | 2051                  | 65       | Surcharge - late filing fee or oath  |          |
| 1052                  | 50       | 2052                  | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053                  | 130      | 1053                  | 130      | Non-English specification  |          |
| 1812                  | 2,520    | 1812                  | 2,520    | For filing a request for reexamination                                     |          |
| 1804                  | 920*     | 1804                  | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805                  | 1,840*   | 1805                  | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251                  | 110      | 2251                  | 55       | Extension for reply within first month                                     |          |
| 1252                  | 420      | 2252                  | 210      | Extension for reply within second month                                    |          |
| 1253                  | 950      | 2253                  | 475      | Extension for reply within third month                                     |          |
| 1254                  | 1,480    | 2254                  | 740      | Extension for reply within fourth month                                    |          |
| 1255                  | 2,010    | 2255                  | 1,005    | Extension for reply within fifth month                                     |          |
| 1401                  | 330      | 2401                  | 165      | Notice of Appeal   |          |
| 1402                  | 330      | 2402                  | 165      | Filing a brief in support of an appeal                                     |          |
| 1403                  | 290      | 2403                  | 145      | Request for oral hearing   |          |
| 1451                  | 1,510    | 1451                  | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452                  | 110      | 2452                  | 55       | Petition to revive – unavoidable   |          |
| 1453                  | 1,330    | 2453                  | 665      | Petition to revive – unintentional   |          |
| 1501                  | 1,330    | 2501                  | 665      | Utility issue fee (or reissue)   |          |
| 1502                  | 480      | 2502                  | 240      | Design issue fee   |          |
| 1503                  | 640      | 2503                  | 320      | Plant issue fee  |          |
| 1460                  | 130      | 1460                  | 130      | Petitions to the Commissioner  |          |
| 1807                  | 50       | 1807                  | 50       | Petitions related to provisional applications                              |          |
| 1806                  | 180      | 1806                  | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021                  | 40       | 8021                  | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809                  | 770      | 2809                  | 385      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810                  | 770      | 2810                  | 385      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801                  | 770      | 2801                  | 385      | Request for Continued Examination (RCE)                                    |          |
| 1802                  | 900      | 1802                  | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$180)

**SUBMITTED BY**

Complete (if applicable)

|                   |   |                                   |        |           |                    |
|-------------------|---|-----------------------------------|--------|-----------|--------------------|
| Name (Print/Type) | Scott L Ausenpus  | Registration No. (Attorney/Agent) | 42,271 | Telephone | 303-571-4000       |
| Signature         |  |                                   |        | Date      | September 20, 2004 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.